

Amendments to Claims

Claim 1 (Currently Amended) . An isolated nucleic acid fragment encoding a plant *cis*-prenyltransferase protein selected from the group consisting of:

- (a) an isolated nucleic acid fragment encoding ~~all or a substantial portion of the~~ amino acid sequence selected from the group consisting of as set forth in SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18 and SEQ ID NO:20;
- ~~(b) an isolated nucleic acid fragment that is substantially similar to an isolated nucleic acid fragment encoding all or a substantial portion of the amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18 and SEQ ID NO:20;~~
- ~~(c) an isolated nucleic acid fragment encoding a polypeptide, the polypeptide having at least 41% identity with the amino acid sequence set forth in SEQ ID NO:24;~~
- ~~(d) an isolated nucleic acid fragment encoding having at least 50% identity with nucleic acid sequence as set forth in SEQ ID NO:23;~~
- (be) an isolated nucleic acid molecule that hybridizes with a nucleic acid sequence of (a) (b), (e) or (d) under the following hybridization conditions when washed with: 0.1X SSC, 0.1% SDS, 65°C and ~~washed with 0.2X SSC, 0.5% SDS;~~
- ~~(f) an isolated nucleic acid fragment that hybridizes with a nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17 and SEQ ID NO:19 under the following hybridization conditions: 0.1X SSC, 0.1% SDS, 65°C and washed with 0.2X SSC, 0.5% SDS; and or~~
- (cg) an isolated nucleic acid fragment that is completely complementary to (a), or (b), (e), (d), (e) or (f).

Claim 2 (Currently Amended). The isolated nucleic acid fragment of Claim 1 selected from the group consisting of as set forth ~~SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17 and SEQ ID NO:19.~~

Claims 3-4 (Canceled).

Claim 5 (Original) . A chimeric gene comprising the isolated nucleic acid fragments of Claim 1 operably linked to suitable regulatory sequences.

Claim 6 (Original). A transformed host cell comprising a host cell and the chimeric gene of Claim 5.

Claim 7 (Original). The transformed host cell of Claim 6 wherein the host cell is selected from the group consisting of plant cells and microbial cells.

Claim 8 (Currently Amended). A host cell according to Claim 7 selected from the group consisting of tobacco (*Nicotiana* spp.), tomato (*Lycopersicon* spp.), potato (*Solanum* spp.), hemp (*Cannabis* spp.), sunflower (*Helianthus* spp.), sorghum (*Sorghum vulgare*), wheat (*Triticum* spp.), maize (*Zea mays*), rice (*Oryza sativa*), rye (*Secale cereale*), oats (*Avena* spp.), barley (*Hordeum vulgare*), rapeseed (*Brassica* spp.), broad bean (*Vicia faba*), french bean (*Phaseolus vulgaris*), other bean species (*Vigna* spp.), lentil (*Lens culinaris*), soybean (*Glycine max*), arabidopsis (*Arabidopsis thaliana*), guayule (*Parthenium argentatum*), cotton (*Gossypium hirsutum*), petunia (*Petunia hybrida*), flax (*Linum usitatissimum*); ~~and~~ carrot (*Daucus carota sativa*); and Hevea.

Claim 9 (Original). The transformed host cell of Claim 7 wherein the host cell is selected from the group consisting of *Aspergillus*, *Saccharomyces*, *Pichia*, *Candida*, *Hansenula*, *Bacillus*, *Escherichia*, *Salmonella* and *Shigella*

Claim 10 (Original). A method of altering the level of expression of a plant *cis*-prenyltransferase protein in a host cell comprising:

- (a) transforming a host cell with the chimeric gene of Claim 6 and;
- (b) growing the transformed host cell produced in step (a) under conditions that are suitable for expression of the chimeric gene resulting in production of altered levels of a plant *cis*-prenyltransferase protein in the transformed host cell relative to expression levels of an untransformed host cell.

Claim 11 (Currently Amended). A method according to Claim 10 wherein the host cell is a plant cell selected from the group consisting of tobacco (*Nicotiana* spp.), tomato (*Lycopersicon* spp.), potato (*Solanum* spp.), hemp (*Cannabis* spp.), sunflower (*Helianthus* spp.), sorghum (*Sorghum vulgare*), wheat (*Triticum* spp.), maize (*Zea mays*), rice (*Oryza sativa*), rye (*Secale cereale*), oats (*Avena* spp.), barley (*Hordeum vulgare*), rapeseed (*Brassica* spp.), broad bean (*Vicia faba*), french bean (*Phaseolus vulgaris*), other bean species (*Vigna* spp.), lentil (*Lens culinaris*), soybean (*Glycine max*), arabidopsis (*Arabidopsis thaliana*), guayule (*Parthenium argentatum*), cotton (*Gossypium hirsutum*), petunia (*Petunia hybrida*), flax (*Linum usitatissimum*) ;~~and~~ carrot (*Daucus carota sativa*); and Hevea.

Claim 12 (Original). A method according to Claim 11 wherein the altering the level of expression of a plant *cis*-prenyltransferase protein results in a modulation in the defense mechanism of the plant.

Claims 13-15 (Canceled).